Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-22. Canceled.

- 23. (Currently amended) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising an amylin or amylin agonist effective to treat obesity, with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist and wherein the amount of the amylin or amylin agonist administered is about 0.01 mg to about 5 mg per day.
- 24. (Previously presented) A method according to claim 23 wherein said amylin agonist is an amylin agonist analogue.
- 25. (Previously presented) A method according to claim 24 wherein said amylin agonist analogue is selected from the group consisting of ^{25,28,29}Pro-h-amylin, ¹⁸Arg^{25,28,29}Pro-h-amylin, and ¹⁸Arg^{25,28}Pro-h-amylin.
- 26. (Previously presented) A method according to claim 24 wherein said amylin agonist analogue is ^{25,28,29}Pro-h-amylin.
- 27. (Previously presented) A method according to claim 23 wherein said amylin or amylin agonist is administered subcutaneously.
- 28. (Previously presented) A method according to claim 26 wherein said amylin agonist analogue is administered subcutaneously.
- 29. (Currently amended) A method according to claim 23 wherein said amylin or amylin agonist is administered from 1 to 4 times per day in an amount from about 30μg/dose to about 300 μg/dose.

- 30. (Currently amended) A method according to claim 29 wherein said amylin or amylin agonist is administered in an amount from about 0.0025 mg/dose to about 5 mg/dose, claim 23 wherein said amylin or amylin agonist is administered in an amount of about 0.01 milligrams per day to about 5 milligrams per day.
- 31. (Previously presented) A method according to claim 23 wherein said amylin or amylin agonist is administered before a meal.
- 32. (Previously presented) A method according to claim 23 wherein said amylin or amylin agonist is administered about 15 minutes of said meal.
- 33. (Currently amended) A method of treating obesity in a human subject comprising administering to said subject a composition comprising an active anti-obesity agent consisting essentially of an amylin or an amylin agoinst in an amount effective to treat obesity, wherein the amount of amylin or amylin agonist administered is about 0.01 mg to about 5 mg per day.
- 34. (Previously presented) A method according to claim 33 wherein said amylin agonist is an amylin agonist analogue.
- 35. (Currently amended) A method according to claim 34 wherein said amylin agonist analogue is selected from the group consisting of ^{25,28,29}Pro-h-amylin, ¹⁸Arg^{25,28}Pro-h-amylin and ¹⁸Arg^{25,28}Pro-h-amylin.
- 36. (Previously presented) A method according to claim 34 wherein said amylin agonist analogue is ^{25,28,29}Pro-h-amylin.
- 37. (Previously presented) A method according to claim 33 wherein said amylin or amylin agonist is administered subcutaneously.
- 38. (Currently amended) A method according to claim 33 wherein said <u>amylin or</u> amylin agonist is administered from 1 to 4 times per day in an amount from about 30 μg/dose to about 300 μg/dose.

- 39. (Previously presented) A method according to claim 33 wherein said amylin or amylin agonist is administered before a meal.
- 40. Canceled.
- 41. (New) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of:

 $^{1}A_{1}$ -X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr 10 Gln-Arg-Leu-B $_{1}$ -Asn- 15 Phe-Leu-C $_{1}$ -D $_{1}$ -E $_{1}$ - 10 F $_{1}$ -G $_{1}$ -Asn-H $_{1}$ -Gly- 25 Pro-I $_{1}$ -Leu-Pro-J $_{1}$ - 30 Thr-K $_{1}$ -Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

 D_1 is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G1 is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu

J₁ is Ser, Pro or Thr;

K₁ is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn, H₁ is Leu, I₁ is

Val, J_1 is Pro, and K_1 is Asn; then one or more A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

42. (New) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of:

 $^1A_1\text{-}X\text{-}Asn\text{-}Thr\text{-}^5Ala\text{-}Thr\text{-}Y\text{-}Ala\text{-}Thr\text{-}^{10}Gln\text{-}Arg\text{-}Leu\text{-}B_1\text{-}Asn\text{-}^{15}Phe\text{-}Leu\text{-}C_1\text{-}D_1\text{-}E_1\text{-}^{20}\text{-}F_1\text{-}G_1\text{-}Asn\text{-}H_1\text{-}Gly\text{-}^{25}Pro\text{-}I_1\text{-}Leu\text{-}J_1\text{-}Pro\text{-}^{30}Thr\text{-}K_1\text{-}Val\text{-}Gly\text{-}Ser\text{-}^{35}Asn\text{-}Thr\text{-}Tyr\text{-}Z$

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

 E_1 is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G1 is Asn, Gln or His;

 H_1 is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

J₁ is Ser, Pro, Leu, Ile or Thr;

K1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino,

cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided than when

- (a) A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn, H₁ is Leu, I₁ is Val, J₁ is Pro and K₁ is Asn; or
- (b) A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is His, E₁ is Ser, F₁ is Asn, G₁ is Asn, H₁ is Leu, I₁ is Val, J₁ is Ser and K₁ is Asn;

then one or more of A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

43. (New) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of:

 $^{1}A_{1}-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_{1}-Asn-^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-^{20}F_{1}-G_{1}-Asn-H_{1}-Gly-^{25}I_{1}-J_{1}-Leu-Pro-Pro-^{30}Thr-K_{1}-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

 D_1 is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

I₁ is Ala or Pro;

J₁ is Ile, Val, Ala or Leu;

Page 7 of 20

K1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn H₁ is Leu, I₁ is Pro, J₁ is Val and K₁ is Asn; then one or more of A₁ to K₁ is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

44. (New) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of:

 1 A₁-X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr- 10 Gln-Arg-Leu-B₁-Asn- 15 Phe-Leu-C₁-D₁-E₁ 20 F₁-G₁-Asn-H₁-Gly- 25 Pro-I₁-Leu-Pro-Pro- 30 Thr-J₁-Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C1 is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

J₁ is Asn, Asp or Gln;

Page 8 of 20

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn, H₁ is Leu, I₁ is Val and J₁ is Asn; then one or more of A₁ to J₁ is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

45. (New) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of:

 $^{1}A_{1}$ -X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr 10 Gln-Arg-Leu-B $_{1}$ -Asn- 15 Phe-Leu-C $_{1}$ -D $_{1}$ -E $_{1}$ - 10 F $_{1}$ -G $_{1}$ -Asn-H $_{1}$ -Gly- 25 Pro-I $_{1}$ -Leu-Pro-J $_{1}$ - 30 Thr-K $_{1}$ -Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A1 is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

 G_1 is Asn, Gln or His;

 H_1 is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu

J₁ is Ser, Pro or Thr;

 K_1 is Asn, Asp or Gln;

Page 9 of 20

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn, H₁ is Leu, I₁ is Val, J₁ is Pro, and K₁ is Asn; then one or more A₁ to K₁ is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

46. (New) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of:

¹A₁-X-Asn-Thr-⁵Ala-Thr-Y-Ala-Thr-¹⁰Gln-Arg-Leu-B₁-Asn-¹⁵Phe-Leu-C₁-D₁-E₁-²⁰-F₁-G₁-Asn-H₁-Gly-²⁵Pro-I₁-Leu-J₁-Pro-³⁰Thr-K₁-Val-Gly-Ser-³⁵Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

J₁ is Ser, Pro, Leu, Ile or Thr,

Page 10 of 20

 K_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided than when

- (a) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Pro and K_1 is Asn; or
- (b) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is His, E_1 is Ser, F_1 is Asn, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Ser and K_1 is Asn;

then one or more of A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

47. (New) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of:

 1 A₁-X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr- 10 Gln-Arg-Leu-B₁-Asn- 15 Phe-Leu-C₁-D₁-E₁- 20 F₁-G₁-Asn-H₁-Gly- 25 I₁-J₁-Leu-Pro-Pro- 30 Thr-K₁-Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

Page 11 of 20

H₁ is Phe, Leu or Tyr;

I₁ is Ala or Pro;

J₁ is Ile, Val, Ala or Leu;

K₁ is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn H_1 is Leu, I_1 is Pro, I_1 is Val and I_2 is Asn; then one or more of I_2 to I_3 is a D-amino acid and I_3 is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

48. (New) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of:

 $^1A_1-X-Asn-Thr-^5Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1^{20}F_1-G_1-Asn-H_1-Gly-^{25}Pro-I_1-Leu-Pro-Pro-^{30}Thr-J_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

Page 12 of 20

H₁ is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

 J_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn, H₁ is Leu, I₁ is Val and J₁ is Asn; then one or more of A₁ to J₁ is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

49. (New) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of:

 $^{1}A_{1}-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr^{10}Gln-Arg-Leu-B_{1}-Asn-^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-^{10}F_{1}-G_{1}-Asn-H_{1}-Gly-^{25}Pro-I_{1}-Leu-Pro-J_{1}-^{30}Thr-K_{1}-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

Page 13 of 20

I1 is Ile, Val, Ala or Leu

J₁ is Ser, Pro or Thr;

K₁ is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val, I_1 is Pro, and I_1 is Asn; then one or more I_1 to I_2 is a D-amino acid and I_2 is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

50. (New) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of:

$$^{1}A_{1}-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_{1}-Asn-^{15}Phe-Leu-C_{1}-D_{1}-E_{1}-^{20}-F_{1}-G_{1}-Asn-H_{1}-Gly-^{25}Pro-I_{1}-Leu-J_{1}-Pro-^{30}Thr-K_{1}-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z$$

wherein

A1 is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C1 is Val, Leu or Ile;

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

Gt is Asn, Gln or His;

Page 14 of 20

 H_1 is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

J₁ is Ser, Pro, Leu, Ile or Thr;

 K_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided than when

- (a) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Pro and K_1 is Asn; or
- (b) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is His, E_1 is Ser, F_1 is Asn, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Ser and K_1 is Asn;

then one or more of A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

51. (New) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of:

 1 A₁-X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr- 10 Gln-Arg-Leu-B₁-Asn- 15 Phe-Leu-C₁-D₁-E₁- 20 F₁-G₁-Asn-H₁-Gly- 25 I₁-J₁-Leu-Pro-Pro- 30 Thr-K₁-Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C1 is Val, Leu or Ile;

Page 15 of 20

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

 H_1 is Phe, Leu or Tyr;

I₁ is Ala or Pro;

J₁ is Ile, Val, Ala or Leu;

K₁ is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A₁ is Lys, B₁ is Ala, C₁ is Val, D₁ is Arg, E₁ is Ser, F₁ is Ser, G₁ is Asn H₁ is Leu, I₁ is Pro, J₁ is Val and K₁ is Asn; then one or more of A₁ to K₁ is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

52. (New) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of:

1
A₁-X-Asn-Thr- 5 Ala-Thr-Y-Ala-Thr- 10 Gln-Arg-Leu-B₁-Asn- 15 Phe-Leu-C₁-D₁-E₁ 20 F₁-G₁-Asn-H₁-Gly- 25 Pro-I₁-Leu-Pro-Pro- 30 Thr-J₁-Val-Gly-Ser- 35 Asn-Thr-Tyr-Z

wherein

A₁ is Lys, Ala, Ser or hydrogen;

B₁ is Ala, Ser or Thr;

C₁ is Val, Leu or Ile;

Page 16 of 20

D₁ is His or Arg;

E₁ is Ser or Thr;

F₁ is Ser, Thr, Gln or Asn;

G₁ is Asn, Gln or His;

H₁ is Phe, Leu or Tyr;

I₁ is Ile, Val, Ala or Leu;

J₁ is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkylamino, arylamino, aralkylamino, alkylamino, arylamino, aralkylamino, arylamino, aralkylamino, arylamino, aralkylamino, aralkylamino, arylamino, aralkylamino, arylamino, arylamino, aralkylamino, arylamino, aralkylamino, arylamino, arylam

provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val and I_2 is Asn; then one or more of A_1 to I_2 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

- 53. (New) The method according to claim 23 wherein the amount administered is from about 30 μ g/dose to about 300 μ g/dose.
- 54. (New) The method according to claim 38 wherein said amylin or amylin agonist is administered in an amount from about 0.0025 mg/dose to about 5 mg/dose.
- 55. (New) The method according to claim 34 wherein said amylin or amylin agonist is administered at a dose from about 30 μ g/dose to about 300 μ g/dose.
- 56. (New) The method according to claim 49 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.

Page 17 of 20

- 57. (New) The method according to claim 49 wherein said peptide is administered at a dose from about 30 μg/dose to about 300 μg/dose.
- 58. (New) The method according to claim 50 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.
- 59. (New) The method according to claim 50 wherein said peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.
- 60. (New) The method according to claim 51 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.
- 61. (New) The method according to claim 51 wherein said peptide is administered at a dose from about 30 μ g/dose to about 300 μ g/dose.
- 62. (New) The method according to claim 52 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.
- 63. (New) The method according to claim 52 wherein said peptide is administered at a dose from about 30 μ g/dose to about 300 μ g/dose.
- 64. (New) The method according to claim 49 wherein said peptide is ^{25,28,29}Pro-h-amylin.
- 65. (New) The method according to claim 50 wherein said peptide is ^{25,28,29}Pro-h-amylin.
- 66. (New) The method according to claim 51 wherein said peptide is ^{25,28,29} Pro-h-amylin.
- 67. (New) The method according to claim 52 wherein said peptide is ^{25,28,29}Pro-h-amylin.